### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014363

Address: 333 Burma Road **Date Inspected:** 15-May-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

**OBG** Assembly Yard

7DW+7CW

Shield Metal Arc Welding (SMAW) welding (VT repair) was performed at various locations on side plate t stiffeners located at cross beam side of segment. Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-Repair-1.

7AW + 7BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 003 located at OBW7N counter weight side of segment. Welder is identified as Mr. Zang Wei (066413). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 003 located at OBW7N counter weight

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side of segment. Welder is identified as Mr. Cao Xinglong (069683). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

7DW+7EW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 008 located at OBW7A deck plate splice of segment. Welder is identified as Mr. Tian Zhaoquan (045246). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2211-B-U2-FCM-1.

7CW

Flux Core Arc Welding (FCAW) welding was performed on weld joint 001 located at SEG037C cross beam side of segment. Welder is identified as Mr. Wen Yanyan (066734). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2231-Tc-U4b-F.

7EW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 009 and 012 located at EP071-001 cross beam side of segment. Welder is identified as Mr. Li Zhengxu (066179). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2114-FCM-1.

7DW

Flux Core Arc Welding (SMAW) welding was performed on weld joint 009 located at SEG039D cross beam side of segment. Welder is identified as Mr. Ji Hua (045227). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2133-Tc-U4b-F.

8BE

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 007 and 008 located at SEG046B cross beam side of segment. Welder is identified as Mr. (220069). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2132.

8BW+8CW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 003 located at OBW8C bottom plate splice of segment. Welder is identified as Mr. Gang Huaigang (037840). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 003 located at OBW8C bottom plate splice of segment. Welder is identified as Mr. Zai Dawei (068097). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

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Shield Metal Arc Welding (SMAW) welding was performed on weld joint 003 located at OBW8C bottom plate splice of segment. Welder is identified as Mr. Zhao Aifei (067942). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 005 located at OBW8C cross beam side of segment. Welder is identified as Mr. Li Wenguo (066261). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 004 located at OBW8C cross beam side of segment. Welder is identified as Mr. Zhou Bing (067764). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





#### **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer